(b)   at least one monitor to (i) examine rainfall data derived from a radar scanning at least the first area according to predetermined criteria and (ii) to extract data which is representative of the scanned rainfall in a sub-area of the first area;

(c)   a store to store the extracted data; and

(d)   a controller connected directly or indirectly to the meter and the monitor and to the store, to calculate a moisture content value for the sub-area and a predetermined moisture content value for the sub-area, and to regulate the irrigation in a sub-area.

2.   (Retyped without change)   The irrigation control system of claim 1 wherein regulation of irrigation in the sub-area is either by initiating or preventing irrigation of the sub-area depending upon whether the moisture content value is less than or more than the predetermined moisture content value for the sub-area.

3.   (Amended)   The irrigation system of [any of the preceding claims] claim 1 wherein there is one monitor.

4.   (Amended)   The irrigation system of [any of the preceding claims] claim 1 wherein the weather conditions measured include solar radiation.

5.   (Amended)   The irrigation system of [any of the preceding claims] claim 1 wherein the monitor is integrated with the controller.

6.   (Amended)   The irrigation system of [any of the preceding claims] claim 1 wherein the controller is a computer.

7.   (Amended)   The irrigation system of [any of the preceding claims] claim 1 wherein the irrigation control system further comprises a local switch in the sub-area to initiate or prevent irrigation in response to signals from the controller.

8.   (Retyped without change)   The irrigation system of claim 7 wherein the local switch in the sub-area activates or de-activates a local controller for initiating or preventing the irrigation, in response to signals from the controller.

9.   (Amended)   The irrigation system of [any of the preceding claims] claim 7 wherein the irrigation control system further comprises an interruptor to interrupt irrigation in the sub-area.

10.   (Retyped without change)   The irrigation system of claim 9 wherein the interruptor interrupts irrigation in the sub-area in response to rainfall in the sub-area.

11.   (Amended)   The irrigation system of [either] claim 9 [or claim 10] wherein the interruption occurs for a period of time determined by the controller.

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12. (Retyped without change) A method of irrigating land is provided comprising the steps of:

(a) measuring one or more weather conditions in a first area;

(b) examining rainfall data derived from a radar scanning at least the first area according to predetermined criteria and extracting data which is representative of the scanned data in a sub-area of the first area;

(c) storing the extracted data;

(d) calculating a moisture content value for the sub-area and a predetermined moisture content value for the sub-area; and regulating the irrigation of the sub-area.

13. (Retyped without change) The method of claim 12 wherein the regulation of the irrigation of the sub-area is either by initiating or preventing irrigation of the sub-area depending upon whether the moisture content value is less than or more than the predetermined moisture content value for the sub-area.

14. (Amended) The method of claim 12 [or claim 13] wherein the measurement in step (a) is carried out in the same sub-area as that in which the measurement is carried out in step (b).

15. (Amended) The method of [any of claims 12 to 14] claim 12 wherein the method comprises a further step of: (f) sensing for rainfall in the sub-area during irrigation and interrupting irrigation in response to rainfall in the sub-area for a period of time controlled by the duration and amount of rainfall.

Please add the following new claims:

16. The irrigation system of claim 2 wherein the weather conditions measured include solar radiation.

17. The irrigation system of claim 10 wherein the interruption occurs for a period of time determined by the controller.

REMARKS

This Preliminary Amendment is being submitted to indicate the relationship of the subject U.S. national application to previously filed applications as required under 37 C.F.R. 1.78, to delete multiple dependencies and to place the claims in somewhat better form for examination. With the entry of the foregoing amendments, the application is believed to be